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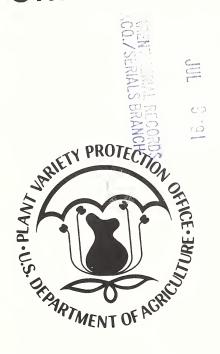


United States Department of Agriculture

Agricultural Marketing Service

Volume 18, No. 2 April - June 1990

Plant Variety Protection Office Official Journal





PREFACE

The Plant Variety Protection Act (7 U.S.C. 2321 et seq.) authorizes the Secretary of Agriculture to publish an Official Journal to provide the public with information relating to the operations of the Plant Variety Protection Office. The statute also authorizes the Secretary to disseminate technological and other information that encourages innovation and progress in plant breeding.

The Official Journal, published quarterly, is available from:

Plant Variety Protection Office
Commodities Scientific Support Division
Agricultural Marketing Service
U. S. Department of Agriculture
Rm. 500, NAL Bldg.
10301 Baltimore Blvd.
Beltsville, Maryland 20705

Telephone: 301/344-2518

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APRIL 1, 1990 TO JUNE 30, 1990 APPLICATIONS RECEIVED

Applications for protection have been filled for the following varieties. Each application has been assigned an application number and will be examined to determine whether the variety is entitled to a certificate of protection. The seed of these varieties may be labeled "Unauthorized Propagation Prohibited - U.S. Variety Protection Applied For."

APPL. NO.	VARIETY	GEN.	GEN. APPL. (*) DATE	NAME OF APPLICANT
ALFALFA 9000152	5373		04/23/1990	Pioneer Hi-Bred International, Inc.
9000153	5472		04/23/1990	Pioneer Hi-Bred International, Inc.
9000155	Alfagraze		04/30/1990	Georgia Agricultural Experiment Station
9000179	Imperial Star		05/23/1990	The Regents of the University of

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations.

APRIL 1, 1990 TO JUNE 30, 1990

ton 1 pin	GEN. APPL. NAME OF APPLICANT (*) DATE	06/08/1990 Wisconsin Agricultural Experiment Station	(3) 06/19/1990 Minnesota Agricultural Experiment Station	06/06/1990 Rogers Brothers Seed Company	06/06/1990 Rogers Brothers Seed Company	06/19/1990 Pybas Vegetable Seed Co., Inc.
NO. BARLEY 9000204 Chil 9000208 Exce BEAN, GARDEN 9000200 Dolp 9000201 Duch CELERY 9000210 Mata	VARIETY	Chilton	Excel	DEN Dolphin	Duchess	Matador

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APPLICATIONS RECEIVED APRIL 1, 1990 TO JUNE 30, 1990

APPL. NO.	VARIETY	CEN.	GEN. APPL. (*) DATE	NAME OF APPLICANT
CHICORY 9000157	Grasslands Puna		05/02/1990	Grasslands Division, New Zealand Dept.
CORN, FIELD	ID LH191		04/10/1990	or Scientific & Industrial Research Holden's Foundation Seeds, Inc.
9000140	LH192		04/10/1990	Holden's Foundation Seeds, Inc.
9000141	LH193		04/10/1990	Holden's Foundation Seeds, Inc.
COTTON 9000150	HS 23		04/17/1990	Helena Chemical Company
				d/b/a HyPerformer Seed Company

U <> Identifies temporary designations.

number of generations of certified seed permitted beyond breeder's seed.

APPLICATIONS RECEIVED
APRIL 1, 1990 TO JUNE 30, 1990

NAME OF APPLICANT	Southland Seed Company	California Planting Cotton Seed Distributors	California Planting Cotton Seed Distributors	Chaney Ranch Research	Stoneville Pedigree Seed Co.	
GEN. APPL.	04/26/1990	(*) 05/07/1990	(*) 05/15/1990	06/22/1990	06/22/1990	
GEN.		*	*			
VARIETY	(Continued) Southland 400	Acala Maxxa	Acala Royale	CH 252	Acala BR-636	
APPL.	COTTON 9000154	9000168	9000173	9000211	9000212	

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APPLICATIONS RECEIVED APRIL 1, 1990 TO JUNE 30, 1990

Continued) Lankart 142 Lankart 142 (3) 06/29/1990 Paymaster HS 200 Clemson Purple 05/21/1990 Fidurado	NO.		(*)	(*) DATE	NAME OF AFFICANT
Clemson Purple 05/21/1990 TALL Flared	COTTON (C 9000215	Continued) Lankart 142	(3)	06/29/1990	Cargill Hybrid Seeds
Clemson Purple 05/21/1990 TALL	9000216	Paymaster HS 200	(3)	06/29/1990	Cargill Hybrid Seeds
TALL Fldorado 04/05/1000	COWPEA 9000177	Clemson Purple		05/21/1990	South Carolina Agricultural Experiment Station
0661 /60 /40	FESCUE, 1 9000133	TALL Eldorado		04/05/1990	Pure-Seed Testing, Inc.
9000134 Olympic II 04/05/1990 Pure-	9000134	Olympic II		04/05/1990	Pure-Seed Testing, Inc.

number of generations of certified seed permitted beyond breeder's seed.

APPLICATIONS RECEIVED APRIL 1, 1990 TO JUNE 30, 1990

ANT	ng, Inc.	nc.	Seeds, Inc.		
NAME OF APPLICANT	Pure-Seed Testing, Inc.	Pickseed West Inc.	Central Valley Seeds, Inc.	Vilmorin S.A.	Genecorp, Inc.
GEN. APPL.	04/30/1990	05/16/1990	04/10/1990	04/11/1990	06/04/1990
GEN.			(*)		
VARIETY	TALL (Continued) <pst-dbc></pst-dbc>	Emperor	Darkland Cos	Sierra	Jazz
APPL.	FESCUE, 9000156	9000176	LETTUCE 9000137	9000142	9000198

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< > Identifies temporary designations.

APRIL 1, 1990 TO JUNE 30, 1990 APPLICATIONS RECEIVED

	riment Station			Research
NAME OF APPLICANT	Wisconsin Agricultural Experiment Station	Alf Christianson Seed Co.	NESTEC S.A.	North Carolina Agricultural Research Service
GEN. APPL. (*) DATE	06/08/1990	(*) 04/06/1990	06/02/1990	(3) 06/01/1990
GEN. (*)		(*)		(3)
VARIETY	Ensiler	Ming Choi	Karl-Evert	NC-V11
APPL. NO.	OAT 9000203	PAK-CHOI 9000135	PEA 9000199	PEANUT 9000197

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APPLICATIONS RECEIVED
APRIL 1, 1990 TO JUNE 30, 1990

VARIETY GEN. APPL. NAME OF APPLICANT (*) DATE		<pre><f11 476="" psr=""> 05/14/1990 Petoseed Co., Inc.</f11></pre>	1 (*) 04/17/1990 University of Idaho	y (*) 04/17/1990 University of Idaho
7	PRIMROSE, EVENING 9000209 Merlin	~	Rebe 1	Cathy
	PRIMROS 9000209	PUMPKIN 9000175	RAPE 9000148	9000149

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NE 30, 1990 CEIVED

APPL.	VARIETY	GEN.	GEN. APPL.	NAME OF APPLICANT
NO.		(*)	DATE	
RICE				
9000158	s-301	(3)	(3) 05/02/1990	California Cooperative Rice Researc
				Foundation, Inc.

сh

N. F. Davis Drier & Elevator, Inc. N. F. Davis Drier & Elevator, Inc.

Rice Researchers, Inc.

06/11/1990

Asgrow Seed Company

04/06/1990

	APPLICATIONS RECEIVED APRIL 1, 1990 TO JUNE 30, 19	RECEIVED JUNE 30, 19
VARIETY	GEN. (*)	APPL. DATE
s-301	(3)	(3) 05/02/1990
NFD 108	(3)	(3) 05/31/1990
NFD 109	(3)	(3) 05/31/1990

9000193

9000194 9000207

<81-114-042> A4715

SOYBEAN 9000136

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APRIL 1, 1990 TO JUNE 30, 1990

		γι	γι	γι	γι	γι
NAME OF APPLICANT	Land O'Lakes, Inc.	Asgrow Seed Company				
APPL. DATE		04/12/1990	04/12/1990	04/12/1990	04/17/1990	04/17/1990
VARIETY GEN. (*)		7	2	y.	901>	8
	N (Continued)	1 A2427	5 A2872	5 A2396	7 <xl1901></xl1901>	I A7258
APPL. NO.	SOYBEAN 9000143	9000144	9000145	9000146	9000147	9000151

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APPLICATIONS RECEIVED
APRIL 1, 1990 TO JUNE 30, 1990

NAME OF APPLICANT	GROWMARK Inc.	FFR Cooperative	Northrup King Co.	Northrup King Co.	Northrup King Co.	Northrup King Co.	
APPL. DATE	05/03/1990	05/03/1990	05/04/1990	05/04/1990	05/04/1990	05/04/1990	
ETY GEN. (*)		64	0	S	80	6	
VARIETY	(Continued) HS 2533	FFR 464	S20-20	S25-15	S28-18	S29-39	
APPL.	SOYBEAN 9000159	9000160	9000163	9000164	9000165	9000166	

number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations. 13

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APPLICATIONS RECEIVED
APRIL 1, 1990 TO JUNE 30, 1990

						y, Inc.
PLICANT	ng Co.	University of Illinois	University of Illinois	University of Illinois	University of Illinois	Jacob Hartz Seed Company, Inc.
NAME OF APPLICANT	Northrup King Co.	University	University	University	University	Jacob Hartz
GEN. APPL. (*) DATE	05/04/1990	05/14/1990	05/14/1990	05/14/1990	05/14/1990	05/21/1990
			· uo:			922
VARIETY	(Continued) S43-34	Kunitz	Hamilton	Jack	Be11	Hartz 922
APPL.	SOYBEAN 9000167	9000169	9000170	9000171	9000172	9000178

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APPLICATIONS RECEIVED
APRIL 1, 1990 TO JUNE 30, 1990

			Inc.	ional, Inc.					
NAME OF APPLICANT			Dairyland Seed Company, Inc.	Pioneer Hi-Bred International, Inc.					
GEN. APPL.	DATE		05/25/1990	05/29/1990	05/29/1990	05/29/1990	05/29/1990	05/29/1990	
GEN	(*)								
VARIETY		(Continued)	DSR-262	9171	9191	9221	9241	9273	
APPL.	NO.	SOYBEAN	9000180	9000181	9000182	9000183	9000184	9000185	

number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations. 15

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APPLICATIONS RECEIVED
APRIL 1, 1990 TO JUNE 30, 1990

	Inc.	Inc.	Inc.	Inc.		
NAME OF APPLICANT	Pioneer Hi-Bred International, Inc.	FFR Cooperative	FFR Cooperative			
GEN. APPL. (*) DATE	05/29/1990	05/29/1990	05/29/1990	05/29/1990	05/30/1990	05/30/1990
GEN (*)						
VARIETY	(Continued) 9311	9381	9681	<ardir></ardir>	FFR 606	FFR 646
APPL. NO.	SOYBEAN 9000186	9000187	9000188	9000189	9000191	9000192

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APPLICATIONS RECEIVED APRIL 1, 1990 TO JUNE 30, 1990

	VARIETY	GEN. APPL. (*) DATE	NAME OF APPLICANT
5 (S	SOYBEAN (Continued) 9000195 DSR-333		Dairyland Seed Company, Inc.
9000196	DSR-373	05/31/1990	Dairyland Seed Company, Inc.
9000205	38735L	06/11/1990	Latham Seed Co.
9000506	BT 1790	06/12/1990	Ziller Seed Farms, Inc.
9000213	BT 2585	06/25/1990	Ziller Seed Farms, Inc.
9000214	Hartz Variety H7190	06/27/1990	Jacob Hartz Seed Company, Inc.
		0001/12/00	Jacob Haitz

number of generations of certified seed permitted beyond breeder's seed.

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APPLICATIONS RECEIVED APRIL 1, 1990 TO JUNE 30, 1990

APPL. VARIETY NO.	Y.	GEN.	GEN. APPL. (*) DATE	NAME OF APPLICANT
TOMATO 9000202 Promo			06/08/1990	Ferry-Morse Seed Company
VINCA ROSEA 9000161 Pretty	Pretty in White		05/03/1990	The University of Connecticut
9000162 Pretty	Pretty in Rose		05/03/1990	The University of Connecticut
WHEAT, COMMON 9000217 814			06/28/1990	Northrup King Co.

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APPLICATIONS AMENDED APRIL 1, 1990 TO JUNE 30, 1990

Information concerning the varieties below has been published previously in the Official Journal's list of "APPLICATIONS RECEIVED." During the examination process, the applicant requested this information amended as indicated below.

APPL. NO.	VARIETY	GEN.	GEN. APPL. (*) DATE	NAME OF APPLICANT
ALFALFA 8900282 Name	LFA 8900282 MultiKing 1 Name of variety changed from 'MultiLeaf 1' to 'MultiKing 1'.	O 'Mult		Northrup King Co.
BARLEY 8600112	EY 8600112 Corniche	(3) 0	(3) 05/02/86	Booker Seeds Limited
8600113 Name to Bo	8600113 Camargue Name of owner of the above barley varieties changed from Hurst, Gunson, Cooper, Taber Ltd. to Booker Seeds Limited.	(3) C changed	(3) 05/02/86 nanged from Hurst,	Booker Seeds Limited Gunson, Cooper, Taber Ltd.

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APRIL 1, 1990 TO JUNE 30, 1990 APPLICATIONS AMENDED

NAME OF APPLICANT	Rogers Brothers Seed Company	Rogers Brothers Seed Company a Gallatin Valley Seed Co.
GEN. APPL.	06/08/87	06/08/87 rieties changed from
VARIETY	Champ	0150 Stride Name of owner of the above garden bean varieties changed from Gallatin Valley Seed Co. to Rogers Brothers Seed Company.
APPL. NO.	BEAN, GARDEN 8700149 Champ	8700150 Stride Name of owner to Rogers Bro

	Inc.	
	Terra International,	
	04/20/88	207'.
		Terra
		to
		270
		HAS
		from
		Name of variety changed from 'HAS 270' to 'Terra 207'.
	207	ety
	erra	vari
	Ĥ	of
COLTON	8800133 Terra 207	Name

Div. of Helena Chemical Co. HyPerformer Seed Company, Name of owner changed from J & S Research Co., Inc. to HyPerformer Seed Co., Division of 03/02/89 Helena Chemical Company.

HS-46

8900104

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APPLICATIONS AMENDED APRIL 1, 1990 TO JUNE 30, 1990

NAME OF APPLICANT	Challenge Seeds Limited	King Agro Inc.	King Agro Inc. ing Grain Inc.
GEN. APPL. (*) DATE	07/25/89 multiflo	04/04/89	10/30/89 ed from K
GEN. (*)	5S, ANNUAL 07/25/89 Concord Crop kind changed from Lolium x hybridum to Lolium multiflorum.		10/30/89 King Agro Name of owner of the above soybean varieties changed from King Grain Inc.
VARIETY	FRASS, ANNUAL 8900275 Concord Crop kind changed from L	K87	0023 TK 89 Name of owner of the about to King Agro Inc.
APPL.	RYEGRASS, ANNUAL 8900275 Cond Crop kind	SOYBEAN 8900144 K87	9000023 TK 89 Name of owner

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	Inc.	Inc.
NAME OF OWNER	04/30/1990 Pioneer Hi-Bred International, Inc. '5364' differs from '629' in spotted ly resistant, while '629' has moderate	04/30/1990 Pioneer Hi-Bred International, Inc. '5683' differs from '581' in pea aphid nsect while '581' has moderate resistance.
NAME	oneer	oneer from
ISSUE	04/30/1990 Pi '5364' differs lly resistant,	04/30/1990 Pi '5683' differs insect while '5
GEN.	 629'. as high	5811. o the i
VARIETY	133 5364 15364' most closely resembles the variety '629'. '5364' differs from '629' in spotted alfalfa aphid resistance, being classified as highly resistant, while '629' has moderate resistance to the insect.	181 5683 O4/30/1990 Pioneer Hi-Bred International, 15683' most closely resembles the variety '581'. '5683' differs from '581' in pea aphid resistance, being classified as resistant to the insect while '581' has moderate resistance.
CERT.	ALFALFA 8900133 5364 '5364' mo alfalfa a _l resistanc	8900181 5683 '5683' mo: resistanc

'5683' and '581' have 50.6% and 25.3% resistant plants, respectively, using data adjusted

to 'CUF 101' at 70% resistant plants.

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UE NAME OF OWNER	(2) 06/29/1990 Dairyland Seed Company, Inc. Saranac', but differs in resistance to phid. Some of the most significant ance (resistant vs susceptible), aphanomyces resistant plants), and spotted aphid o differ in flower color, with 'Magnum III' each of cream, yellow, and white.	05/31/1000 W-T Bossessh Tax
GEN. ISSUE	06/2, nac', l. Sou (res stant iffer	05/3
GEN.	(2) 'Sara aphid aphid stance tresi	
CERT. VARIETY NO.	ALFALFA (Continued) 8900229 Magnum III Magnum III is most similar to the variety 'Saranac', but differs in resistance to several diseases as well as spotted alfalfa aphid. Some of the most significant differences are: phytophthora root rot resistance (resistant vs susceptible), aphanomyces (low resistance vs susceptible 17.6% vs 3.4% resistant plants), and spotted aphid (moderate vs susceptible). The varieties also differ in flower color, with 'Magnum III' possessing 80% purple, 17% variegated, and 1% each of cream, yellow, and white.	8900266 WT. 317

resistance (14%) for 'Arrow'. 'WL 317' is also higher in spotted alfalfa aphid resistance resistance. 'WL 317' is classed as resistant to anthracnose (24% resistance) vs moderate 'WL 317' is most similar to the variety 'Arrow' in growth type, appearance, and pest 05/31/1990 W-L Research, inc. (resistant at 33%), while 'Arrow' is rated at low resistance (8%). 0200C0

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	Inc.	Inc.
ISSUE NAME OF OWNER DATE	most closely resembles the variety 'Sure'. '5373' differs from 'Sure' in spotted applied resistance and phytophthora root rot resistance, being classified as high and moderately resistant, while 'Sure' has low resistance and resistance,	06/29/1990 Pioneer Hi-Bred International, Inc. '5472' differs from '5364' in fall Plants of the variety '5472' averaged through IV with at least 9-13 ed significantly in the level of cterial wilt: '5472' is rated as highly for '5364' with 39.24% resistant plants ohid: '5472' showed 56.3% resistant
GEN.	Sure'. oot rot	5364'. fall. zones l differ ect: ba sistant tted ap
CERT. VARIETY NO. AIFALEA (Continued)	9000152 5373 9000152 5373 15373' most closely resembles the variety 'Sure'. '5373' differs from 'Sure' in spotter alfalfa aphid resistance and phytophthora root rot resistance, being classified as high resistance and moderately resistant, while 'Sure' has low resistance and resistance, respectively.	9000153 5472 '5472' most closely resembles the variety '5364'. '5472' differs from '5364' in fall growth, being taller in field plots in the fall. Plants of the variety '5472' averaged 29% taller (p<0.05), having been tested in zones I through IV with at least 9-13 replications per zone. In addition, '5472' differed significantly in the level of resistance to the following disease and insect: bacterial wilt: '5472' is rated as highly resistant with 73.4% resistant plants vs resistant for '5364' with 39.24% resistant plants (both values adjusted to Vernal @ 42%); spotted aphid: '5472' showed 56.3% resistant plants plants vs 78% for '5364' (both adjusted to Kanza @ 70%).

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J	CERT. VARIETY	×	GEN.	ISSUE	NAME OF OWNER
	NO.		(*)	DATE	
BEAN,	BEAN, GARDEN				
86	8600053 Goldkist			05/31/1990	05/31/1990 Rogers Brothers Seed Company
	'Goldkist' is m	ost similar to	'Goldrush'; however	, 'Goldkist'	'Goldkist' is most similar to 'Goldrush'; however, 'Goldkist' is tolerant to bean rust
	races 40, 49, 50	0, 51, and 56,	races 40, 49, 50, 51, and 56, whereas 'Goldrush' is susceptible.	is susceptib.	le.
Ċ				0007700	
2	20,42,000				THE PROPERTY OF THE PROPERTY O

'Blue Knight' most closely resembles 'Oregon 58'; however, 'Blue Knight' is classified as 04/30/1990 Ferry-Morse Seed Company resistant to races 45 and 49 of Uromyces appendiculatus L., whereas 'Oregon 58' is 8700025 Blue Knight susceptible.

BENTGRASS, CREEPING

05/31/1990 Seed Research of Oregon, Inc. 'SR 1020' is most similar to 'Penncross'; however, 'SR 1020' has an average mature plant height 17 cm shorter (52 cm vs 69 cm) than 'Penncross'. 8800047 SR 1020

the number of generations of certified seed permitted beyond breeder's seed.

NAME OF OWNER	05/31/1990 DeKalb-Pfizer Genetics has red anthers and 11 tassel branches branches.	04/30/1990 Seed Research of Oregon, Inc. i'; however, 'SR 3000' is more resistant iR 3000' has an average nature plant flag leaf (5.5 cm vs 6.3 cm) than
GEN. ISSUE	05/31/1990 has red a branches.	04/30/1990 '; however, R 3000' has flag leaf
GEN.	, 'IBC2	Scaldis
VARIETY	most similar to 'Mo17Ht'; however	156 SR 3000 158 SR 3000 159 Seed Research of Oregon, Included is most similar to 'Aurora' and 'Scaldis'; however, 'SR 3000' is more resistant to powdery mildew than 'Aurora' and 'Scaldia'. 'SR 3000' has an average nature plant height 7 cm shorter (80 cm vs 87 cm) and a shorter flag leaf (5.5 cm vs 6.3 cm) than 'Scaldia'.
CERT.	CORN, FIELD 8700198 IBC2 'IBC2' is	FESCUE, HARD 8800156 SR 3000 'SR 3000' is to powdery m height 7 cm is

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	Experiment. 2 vs. s
OWNE R	(3) 05/31/1990 Minnesota Agricultural Experiment Station Starter' has greater test weight (34.2 vs 3 vs 68.4%) than 'Noble'. 'Starter' has C 58', whereas 'Noble' is susceptible to race
NAME OF OWNER	Minnesota Station greater te n 'Noble'.
ISSUE	05/31/1990 starter has s 68.4%) tha
GEN.	(3) rer, 'S 71.3 vs
VARIETY	8700067 Starter Station Starter' is most similar to 'Noble'; however, 'Starter' has greater test weight (34.2 vs 31.5 lbs/bu) and higher groat percentage (71.3 vs 68.4%) than 'Noble'. 'Starter' has seedling resistance to oat crown rust race 'PC 58', whereas 'Noble' is susceptible to race 'PC 58',
CERT.	8700067 'St 31. See

RYEGRASS, PERENNIAL

The tiller leaves of 'Yatsyn 1' are shorter than 'Ellett' and 'Nui' (21 cm vs 23 cm and 24 (3) 05/31/1990 New Zealand Agriseeds Ltd. lighter green and more erect in post heading habit than 'Ellett', 'Nui', and 'Ruanui'. 'Yatsyn 1' is most similar to 'Ellett', 'Nui', and 'Ruanui'; however, 'Yatsyn 1' is cm respectively) and broader than 'Ruanui' (7.5 mm vs 5.9 mm). 8900272 Yatsyn 1

the number of generations of certified seed permitted beyond breeder's seed.

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2					
8	CERT. VARIETY NO.	GEN.	ISSUE	NAME OF OWNER	
	RYEGRASS, PERENNIAL (Continued) 8900297 Accolade		04/30/1990	04/30/1990 The O M Cco++ E Cone Commany	
	'Accolade' is most similar to 'Premier'; however,	owever,	'Accolade'	'Accolade' is more resistant to leaf	
	rust and snow mold than 'Premier'.	•			
	TRITICALE				
	8700205 Stan-I		04/30/1990	04/30/1990 Pioneer Hi-Bred International, Inc.	
	'Stan-I' is most similar to 'Jenkins'; however, 'Stan-I' heads 7 days earlier than 'Jenkins' and is 12 cm shorter than 'Jenkins'.	ever, 'S	tan-I' head	s 7 days earlier than	
	8700206 Eve		04/30/1990	04/30/1990 Dioneer Hi-Bred International Inc	
	'Eve' is most similar to 'Beagle'; however, 'Eve' has shorter, more erect "wheat type"	, 'Eve'	has shorter	, more erect "wheat type"	
	spikes whereas 'Beagle' has "rye type" spikes. 'Eve' is approximately 8 cm shorter than	kes. 'I	ve' is appr	oximately 8 cm shorter than	
	beagle: under both dryland and irrigated conditions. Kernels of 'Eve' are smaller (43 مر1000) باماداته معملة بهداته مراوبات (43 مر1000) باماداته معملة بهداته باماداته الماداته المادا	condition of Ivide	ns. Kernel	s of 'Eve' are smaller (43	
		7		• • • • • • • • • • • • • • • • • • • •	
	(*) To be sold by variety name only as a class of	certifie	d seed. A	by variety name only as a class of certified seed. A number within parenthesis indicates	

the number of generations of certified seed permitted beyond breeder's seed.

GEN. ISSUE NAME OF OWNER (*) DATE		04/30/1990 Pioneer Hi-Bred International,	'Victoria' is most similar to 'Beagle'; however, 'Victoria' is 8 cm shorter than 'Beagle'	nan 'Beagle' under irrigated land conditions.	
CERT. VARIETY NO.	TRITICALE (Continued)	8700207 Victoria	'Victoria' is most similar to 'Beagle'; howev	under dryland conditions and 11 cm shorter than 'Beagle' under irrigated land conditions.	'Victoria' has more erect spikes than 'Beagle'.

Inc.

WHEAT, COMMON

(3) 05/31/1990 Columbia Basin Seeds 'Basin' is most similar to 'Nugaines'; however, 'Basin' is 4 to 20 cm shorter than 'Nugaines' in Idaho. 8500177 Basin

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. 29

NAME OF OWNER	(3) 04/30/1990 Kansas Agricultural Experiment	Station fied as resistant to	ins biotype of Hessian fly,	us and resistant to the
GEN. ISSUE	3) 04/30/1990	Karl' is classi	o the Great Pla	heat mosaic vir
CERT. VARIETY GI	WHEAT, COMMON (Continued) 8900074 Karl (:	Station 'Karl' is most similar to 'Parker'; however, 'Karl' is classified as resistant to	soilborne wheat mosaic virus and susceptible to the Great Plains biotype of Hessian fly,	whereas 'Parker' is susceptible to soilborne wheat mosaic virus and resistant to the Great Plains biotype of Hessian flv.

05/31/1990 Pioneer Hi-Bred International, Inc. the rachises, whereas '2172' has an erect juvenile growth habit and has hairs absent from '2163' is most similar to '2172'; however, '2163' has lax spikes, square glume shoulders, brown reaction when tested with phenol while those of '2172' give a light brown reaction. growth habit and has hairs present on the auricles but absent from the last internode of and recurved flag leaves at boot stage, whereas '2172' has dense spikes, elevated glume shoulders, and erect flag leaves at boot stage. '2163' has a semi-erect juvenile plant the auricles but present on the last internode of the rachises. Seed of '2163' give a

(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

NAME OF OWNER	05/31/1990 Pioneer Hi-Bred International, Inc.	12158' is most similar to '2157'; however, '2158' has a prostrate juvenile growth habit and long, wide glumes, whereas '2157' has a semi-erect juvenile growth habit and short, narrow glumes. '2158' does not have a waxy bloom whereas '2157' has a waxy bloom.
ISSUE	05/31/199	has a pro erect juve whereas '
GEN.		'2158' semi-e
		to '2157'; however, whereas '2157' has a does not have a waxy
Į.	(pa	similar glumes, v
VARIETY	Continue 58	is most g, wide glumes.
CERT.	WHEAT, COMMON (Continued) 8900206 2158	'2158' and lon narrow

the number of generations of certified seed permitted beyond breeder's seed.

W The following certificates have been amended in accordance with sections 180.103, 180.122, and 180.130 of the Regulations and Rules of Practice under the Plant Variety Protection Act.

			Company	
			Seed (mpany
OWNER			rothers	Seed Co
NAME OF OWNER			05/31/1990 Rogers Brothers Seed Company	Name of owner changed from Gallatin Valley Seed Co. to Rogers Brothers Seed Company.
IE .			/1990	Rogers
ISSUE	DATE		05/31	. to
GEN.	*			og pa
_	-,			y See
				Valle
				Gallatin
				from
STY				changed
VARIETY			dkist	owner
			601	ot
CERT.	NO.	BEAN, GARDEN	8600053 Goldkist	Name
		BEAN		

DeKalb-Pfizer Genetics Statement of novelty changed to read "'78010' is most similar to 'A634Ht'; however, '78010' has purple anthers whereas 'A634Ht' has pink anthers." 04/30/86 8500126 78010 CORN, FIELD

Variety name changed from 'Sunkist' to 'Goldkist'.

(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations.

APRIL 1, 1990 TO JUNE 30, 1990 CERTIFICATES AMENDED

	CERT.	VARIETY	GEN. ISSUI	GEN. ISSUE	NAME OF OWNER
SOY	SOY BEAN 7400097	3034	(3)	(3) 10/30/74	The Lubrizol Corporation
	7700075 3035	3035		09/29/78	The Lubrizol Corporation
	8000015	8000015 Riverside 2025		05/15/80	The Lubrizol Corporation
	8400035	8400035 Riverside 303C		01/31/86	The Lubrizol Corporation
	8400036 Name Agriq	8400036 Riverside 2024 Name of owner of the above five soybean varieties changed from Lynnville Seed Co. to Agrigenetics Corporation (a Delaware corporation) to The Lubrizol Corporation.	ties ion)	02/22/85 changed from to The Lubra	The Lubrizol Corporation Incomplete Seed Co. to izol Corporation.
I € 33	To be so indicate	(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.	tifie	d seed. A permitted be	number within parenthesis syond breeder's seed.

< > Identifies temporary designations.

CERTIFICATES AMENDED APRIL 1, 1990 TO JUNE 30, 1990

CERT.	VARIETY	GEN.	ISSUE	NAME OF OWNER
SOYBEAN (Continued) 8100091 J103	tinued) J103		04/15/82	The Lubrizol Corporation
8100092 J-112	J-112	Ū	01/14/82	The Lubrizol Corporation
8400009	J82	Ü	02/22/85	The Lubrizol Corporation
8400079 J-72	J-72	Ū	05/31/85	The Lubrizol Corporation
8400080 J-8287	J-8287	Ü	03/31/86	The Lubrizol Corporation
Name Agri	Name of owner of the above five soybean varieties changed from Jacques Seed Co. to Agrigenetics Corporation (a Delaware Corporation) to The Lubrizol Corporation.	ies (on)	changed fro	m Jacques Seed Co. to izol Corporation.
				4

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations.

CERTIFICATES AMENDED APRIL 1, 1990 TO JUNE 30, 1990

NO.	VARIETY	E	GEN. ISSUE	name of owner
SOYBEAN (Continued) 8400081 J-8389	tinued) J-8389	J	05/31/85	The Lubrizol Corporation
8500173 J-231 Name of own Agrigenetic	173 J-231 Name of owner of the above two soybean varieties changed from Jacques Seed Co. to Agrigenetics Corporation (a Delaware Corporation) to The Lubrizol Corporation.	es cl	04/30/87 hanged from to The Lubri	The Lubrizol Corporation Jacques Seed Co. to izol Corporation.
8700191 Name	8700191 NattoKing K86 Name of owner changed from King Grain Inc. to King Agro Inc.	(King		King Agro Inc.

Variety with temporary designation <XW171> named '2158'. 8900206 2158 WHEAT, COMMON

International, Inc.

05/31/1990 Pioneer Hi-Bred

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations.

CERTIFICATES VOLUNTARILY ABANDONED APRIL 1, 1990 TO JUNE 30, 1990

propagation of these varieties is no longer prohibited by the Plant Variety Protection Act, varieties published protection for the varieties listed below are voluntarily abandoned at the request of the owner. Although In compliance with Section 180.104(d) of the Plant Variety Protection Act, certificates of plant variety in this list may possibly be protected under the Patent Act.

DATE ABANDONED	06/12/1990
VARIETY	Titania
CERT. NO.	8200008
KIND	PEA

CERTIFICATES EXPIRED APRIL 1, 1990 TO JUNE 30, 1990

Protection Act no longer prohibits the unauthorized propagation of these varieties nor requires them to be sold by variety name only as a class of certified seed. However, varieties published in this The term of protection has expired for the certificates listed below. The U.S. Plant Variety list may possibly be protected under the Patent Act.

CERT.	VARIETY G	GEN. EXPIRATION (*) DATE	NAME OF APPLICANT
LETTUCE 7100001	Green Ice	04/10/1990	W. Atlee Burpee Company
7100092	Montemar	04/10/1990	04/10/1990 Ferry-Morse Seed Company
7100095	Super 59	04/10/1990	Ferry-Morse Seed Company
7100096	Vanmax	04/10/1990	04/10/1990 Ferry-Morse Seed Company
7300016	Picoverde	04/10/1990	Sunseeds Genetics, Inc.
7300044	7300044 Great Lakes 659-700	04/10/1990	Asgrow Seed Company

(*) The Plant Variety Protection Act no longer requires these varieties to be sold by variety name only as a class of certified seed.

GENERAL INFORMATION

PATENT DEPOSITORY LIBRARY NOW HAS PVP FORMS AVAILABLE

Mr. Lawrence J. Perk announced this month that the Ohio State University Library, 1858 Neil Avenue Mall, Columbus, Ohio, now has Plant Variety Protection forms available to the public. This includes the Exhibit C Objective Description form for the various crops. The telephone number is (614) 292-6175.

CORRECTION

Correction to Previous Official Journal Volume 18, No. 1, for January - March 1990, Page 31:

In the "Certificates Amended" section, Certificates No. 8500186, '71-72', and No. 8700116, '71-75', both tomato varieties, were listed as having changed ownership. This was in error. They are both owned by the Del Monte Corporation.

DESCRIPTION OF PUBLIC VARIETIES

In accordance with section 180.800 of the Plant Variety Protection Act, descriptions of "public varieties" voluntarily submitted on PVP objective description forms will be accepted for publication in the PVP Official Journal. Publication of such descriptions in no way constitutes recognition of the variety as novel or entitles it to protection under the Plant Variety Protection Act.

The following are descriptions of public varieties of inbred corn lines developed by Dr. M. M. Goodman, Professor of Crop Science at North Carolina State University.

The "PV Number" assigned to each variety should not be construed as meaning the variety is protected under the PVP Act; it is merely the accession number of that variety in the Office's database of corn variety descriptions.

Requests for seed samples and further information about these six cultivars should be directed to Department of Crop Science, North Carolina State University, Box 7620, Raleigh, NC 27695.

Variety Name: 'NC266A'

Inbred line 'NC266A' was derived from 'B73²' x 'NC250'. It shares the same S4 parent as 'NC266'. It is tolerant to gray leaf spot (caused by Cercospora zeae-maydis) and southern leaf blight (caused by Bipolaris maydis). 'NC266A' should serve well as either male or female parent of single crosses. It has about the same maturity and stature as 'B73' but is a flinty dent. 'NC266A' is designed to be used in sister line crosses with 'NC266' for seed production purposes, where uniformity of modified single crosses is necessary. Under many conditions, 'NC266A' is a superior seed parent to 'NC266'. It was released in the S8 generation in February 1990.

PV Number: 9010005

Breeder: Dr. M. M. Goodman, Professor of Crop Science, North Carolina State University.

Kernel Type	Dent	Anther Color	Yellow
Best Region	SE USA	Glume Color	Pink
Chromosome No.	Diploid	Dry Ear Length	13 cm
Days to Mid Silk	75	Dry Ear Diameter	40 mm
Heat Units to		Dry Ear Weight	72 gm
Mid Silk	1752	Row Distinctness	Distinct
Days to 25%		No. Kernel Rows/Ear	12
Moisture	51	Row Straightness	Straight
Heat to 25%		Exposed Silk Color	Green
Moisture	1399	Fresh Husk Color	Light Green
Plant Height	135 cm	Dry Husk Color	Buff
Ear Height	50 cm	Husk Extension	
Internode Length	8 cm	Beyond Ear	8-10 cm
Tillers/Plant	None	Husk Leaf Length	< 8 cm
Ears/Plant	Slight 2-ear	Ear Shank Length	9 cm
Cytoplasm Type	Normal	No. Shank Internodes	6
Leaf Color	Medium Green	Dry Ear Position	Upright
Leaf Angle	<30 degrees	Ear Taper	Average
Leaf Sheath		Ear Drying Time	Average
Pubescence	Light	Dry Kernel Length	10 mm
Leaf Marginal		Dry Kernel Width	8 mm
Waves	Few	Dry Kernel Thickness	5 mm
Leaf Creases	Few	Kernel Shape Grade	<20% Rounds
Leaf Width	8 cm	Pericarp Color	Colorless
Leaf Length	60 cm	Aleurone Color	White
Leaves/Plant	12	Endosperm Color	Yellow
Tassel Branch		Endosperm Type	Normal Starch
Number/Plant	8	Seed Weight	28 g/100
Tassel Branch		Cob Mid Point	
Angle	>45 degrees	Diameter	12 mm
Peduncle Length		Cob Strength	Strong
Blade to Branch	5 cm	Cob Color	Red
Pollen Shed	Medium		

<u>Plant Diseases</u>: Tolerant to southern leaf blight (caused by <u>Bipolaris maydis</u>), gray leaf spot (caused by <u>Cercospora zeae-maydis</u>), and <u>Common Smut.</u>

Variety Name: 'NC270A'

Inbred line 'NC270A' was derived from 'B73' x 'NC250'. It shares the same S5 parent as 'NC270'. It is tolerant to gray leaf spot (caused by Cercospora zeae-maydis) and southern leaf blight (caused by Bipolaris maydis), and it carries some resistance to northern leaf blight (caused by Helminthosporium turcicum). 'NC270A' has small flinty kernals, but combines well with Lancaster inbreds. It is 1-2 days earlier than 'B73'. Although 'NC270A' has the narrow leaf type of 'NC250' and 'NC270', it is equivalent in stature to 'B73'. 'NC270A' is designed to be used in sister line crosses with 'NC270'. Neither 'NC270' nor 'NC270A' are good parents despite their yield and disease resistance potential in crosses. They are the most resistant Stiff Stalk background lines that have any real yield potential in crosses. 'NC270A' was released in the S12 generation in February 1990.

PV Number: 9010006

Breeder: Dr. M. M. Goodman, Professor of Crop Science, North Carolina State University.

Kernal Type	Flint	Anther Color	Purple
Chromosome No.	Diploid	Glume Color	Pink
Days to Mid Silk	69	Dry Ear Length	15 cm
Heat Units to		Dry Ear Diameter	30 mm
Mid Silk	1587	Dry Ear Weight	45 gm
Days to 25%		Row Distinctness	Distinct
Moisture	55	No. Kernal Rows/Ear	14
Heat to 25%		Row Straightness	Slightly Curved
Moisture	1376	Exposed Silk Color	Green
Plant Height	130 cm	Fresh Husk Color	Light Green
Ear Height	50 cm	Dry Husk Color	Buff
Internode Length	10 cm	Husk Extension	
Tillers/Plant	None	Beyond Ear	Barely
Ears/Plant	Single	Husk Leaf Length	< 8 cm
Cytoplasm Type	Normal	Ear Shank Length	13 cm
Leaf Color	Medium Green	No. Shank Internodes	8
Leaf Angle	>60 degrees	Dry Ear Position	Upright
Leaf Sheath		Ear Taper	Average
Pubescence	Medium	Ear Drying Time	Average
Leaf Marginal		Dry Kernal Length	9 mm
Waves	Many	Dry Kernal Width	7 mm
Leaf Creases	Absent	Dry Kernal Thickness	7 mm
Leaf Width	6 cm	Kernal Shape Grade	60-80% Rounds
Leaf Length	62 cm	Pericarp Color	Colorless
Leaves/Plant	12	Aleurone Color	White
Tassel Branch		Endosperm Color	Yellow
Number/Plant	9	Endosperm Type	Normal Starch
Tassel Branch		Seed Weight	27 g/100
Angle	30-45 degrees	Cob Mid Point	-
Peduncle Length	3 cm	Diameter	14 mm
Pollen Shed	Medium	Cob Strength	Weak
		Cob Color	Pink

Plant Diseases: Tolerant to northern leaf blight (caused by Helminthosporium turcicum), southern leaf blight (caused by Bipolaris maydis), gray leaf spot (caused by Cercospora geae-maydis), Common Smut and Head Smut.

Variety Name: 'NC278A' PV Number: 9010007

Inbred line 'NC278A' was derived from 'ETO Blanco P.B.' x 'B73G²'. It shares the same S5 parent as 'NC278'. 'NC278A' should serve well as either male or female parent of single crosses. It has about the same maturity and stature as 'B73'. 'NC278A' has superior plant health to 'NC278' and is equivalent to 'NC278' in yield, seed quality, and lodging resistance. 'NC278A' is one of a very few U.S. lines containing tropical germplasm (25% ETO synthetic developed at CIMMYT from the original Colombian ETO). It may be a potential replacement for 'NC278'. It was released in the S7 generation in February 1990.

Breeder: Dr. M. M. Goodman, Professor of Crop Science, North Carolina State University.

Kernel Type	Dent	Anther Color	Yellow
Chromosome No.	Diploid	Glume Color	Pink
Days to Mid Silk	71	Dry Ear Length	15 cm
Heat Units to		Dry Ear Diameter	36 mm
Mid Silk	1641	Dry Ear Weight	99 gm
Days to 25%		Row Distinctness	Distinct
Moisture	55	No. Kernel Rows/Ear	16
Heat to 25%		Row Straightness	Straight
Moisture	1510	Exposed Silk Color	Green
Plant Height	150 cm	Fresh Husk Color	Light Green
Ear Height	60 cm	Dry Husk Color	Buff
Internode Length	10 cm	Husk Extension	
Tillers/Plant	None	Beyond Ear	Barely
Ears/Plant	Single	Husk Leaf Length	< 8 cm
Cytoplasm Type	Normal	Ear Shank Length	12 cm
Leaf Color	Medium Green	No. Shank Internodes	9
Leaf Angle	<30 degrees	Dry Ear Position	Upright
Leaf Sheath		Ear Taper	Slight
Pubescence	Medium	Ear Drying Time	Average
Leaf Marginal		Dry Kernel Length	10 mm
Waves	Few	Dry Kernel Width	6 mm
Leaf Creases	Absent	Dry Kernel Thickness	5 mm
Leaf Width	7 cm	Kernel Shape Grade	<20% Rounds
Leaf Length	65 cm	Pericarp Color	Colorless
Leaves/Plant	11	Aleurone Color	White
Tassel Branch		Endosperm Color	Yellow
Number/Plant	8	Endosperm Type	Normal Starch
Tassel Branch		Seed Weight	23 g/100
Angle	>45 degrees	Cob Mid Point	
Peduncle Length		Diameter	18 mm
Blade to Branch	5 cm	Cob Strength	Strong
Pollen Shed	Heavy	Cob Color	Pink

Plant Diseases: Tolerant to Common Smut.

Variety Name: 'NC292' PV Number: 9010008

Inbred line 'NC292' was derived from 'B73⁴' x 'NC250'. It shares the same BCF₁ parent as 'NC274'. It has good tolerance southern leaf blight (caused by <u>Bipolaris maydis</u>). 'NC292' has small tassels, especially in winter nurseries, but the tassels shed well. It is about 1-2 days earlier than 'B73' and is shorter, with lower ear height, than 'B73'. 'NC292' is the only publicly released high percentage (94%) 'B73'-type line with <u>Bipolaris maydis</u> resistance. It was released in the S6 generation in February 1990.

 $\mbox{Breeder:}\ \mbox{Dr. M.}\ \mbox{M.}\ \mbox{Goodman, Professor of Crop Science, North Carolina State University.}$

Kernel Type	Dent	Anther Color	Red
Best Region	SE USA	Glume Color	Red
Chromosome No.	Diploid	Dry Ear Length	13 cm
Days to Mid Silk	72	Dry Ear Diameter	38 mm
Heat Units to		Dry Ear Weight	120 gm
Mid Silk	1668	Row Distinctness	Distinct
Days to 25%		No. Kernel Rows/Ear	20
Moisture	51	Row Straightness	Slightly Curved
Heat to 25%		Exposed Silk Color	Green
Moisture	1401	Fresh Husk Color	Light Green
Plant Height	130 cm	Dry Husk Color	Buff
Ear Height	31 cm	Husk Extension	
Internode Length	11 cm	Beyond Ear	Barely
Tillers/Plant	None	Husk Leaf Length	< 8 cm
Ears/Plant	Single	Ear Shank Length	7 cm
Cytoplasm Type	Normal	No. Shank Internodes	6
Leaf Color	Medium Green	Dry Ear Position	Upright
Leaf Angle	<30 degrees	Ear Taper	Average
Leaf Sheath		Ear Drying Time	Average
Pubescence	Medium	Dry Kernel Length	11 mm
Leaf Marginal		Dry Kernel Width	7 1000
Waves	Few	Dry Kernel Thickness	4 mm
Leaf Creases	Absent	Kernel Shape Grade	20-40% Rounds
Leaf Width	7 cm	Pericarp Color	Colorless
Leaf Length	53 cm	Aleurone Color	White
Leaves/Plant	9	Endosperm Color	Yellow
Tassel Branch		Endosperm Type	Normal Starch
Number/Plant	7	Seed Weight	24 g/100
Tassel Branch		Cob Mid Point	
Angle	<30 degrees	Diameter	19 mm
Peduncle Length		Cob Strength	Strong
Blade to Branch		Cob Color	Pink
Pollen Shed	Medium		

Plant Diseases: Tolerant to southern leaf blight (caused by Bipolaris maydis), and Common Smut.

Variety Name: 'NC294'

Inbred line 'NC294' was derived from 'B73²' x 'NC250'. It shares the same S3 parent as 'NC268'. It is tolerant to gray leaf spot (caused by Cercospora zeae-maydis) and southern leaf blight (caused by Bipolaris maydis), and it has some resistnace to northern leaf blight (caused by Helminthosporium turcicum). 'NC294' should serve well as either male or female parent of single crosses. It is similar to 'B73' but 'NC294' is 1-2 days later, taller and flintier than 'B73'. 'NC294' is a vigorous line that is 75% 'B73' by origin and is unique among 'B73'-type lines in its combination of productivity and disease resistance. It was released in the S9 generation in February 1990.

PV Number:

9010009

Breeder: Dr. M. M. Goodman, Professor of Crop Science, North Carolina State University.

Kernel Type	Flint	Anther Color	Pink
Best Region	SE USA	Glume Color	Green
Chromosome No.	Diploid	Dry Ear Length	13 cm
Days to Mid Silk	76	Dry Ear Diameter	42 mm
Heat Units to		Dry Ear Weight	110 gm
Mid Silk	1780	Row Distinctness	Distinct
Days to 25%		No. Kernel Rows/Ear	18
Moisture	47	Row Straightness	Straight
Heat to 25%		Exposed Silk Color	Green
Moisture	1288	Fresh Husk Color	Light Green
Plant Height	170 cm	Dry Husk Color	Buff
Ear Height	54 cm	Husk Extension	
Internode Length	12 cm	Beyond Ear	8-10 cm
Tillers/Plant	None	Husk Leaf Length	< 8 cm
Ears/Plant	Strong 2-ear	Ear Shank Length	8 cm
Cytoplasm Type	Normal	No. Shank Internodes	5
Leaf Color	Medium Green	Dry Ear Position	Upright
Leaf Angle	<30 degrees	Ear Taper	Average
Leaf Sheath		Ear Drying Time	Average
Pubescence	Medium	Dry Kernel Length	12 mm
Leaf Marginal		Dry Kernel Width	7
Waves	Few	Dry Kernel Thickness	4 mm
Leaf Cresses	Absent	Kernel Shape Grade	20-40% Rounds
Leaf Width	8 cm	Pericsrp Color	Colorless
Leaf Length	57 cm	Aleurone Color	White
Leaves/Plsnt	11	Endosperm Color	Yellow
Tassel Branch		Endosperm Type	Normal Starch
Number/Plant	7	Seed Weight	26 g/100
Tassel Branch		Cob Mid Point	
Angle	<30 degrees	Diameter	23 mm
Peduncle Length		Cob Strength	Strong
Blade to Branch	11 cm	Cob Color	Pink
Pollen Shed	Medium		

Plant Diseases: Tolerant to northern lesf blight (csused by Helminthosporium turcicum), southern lesf blight (csused by Bipolsris maydis), grsy leaf spot (csused by Cercospora zeae-maydis), and Common Smut.

Varisty Name: 'NC296'

Inbred line 'NC296' was derived from intercrossing two tropical hybrids, 'Pioneer X105A' from Jamaica and 'H-5' from El Salvador. It was selected for earlier, shortsr, srect plants. 'NC296' is shorter than 'B73' but is about 4 days later in North Caroline. In Florida nurseries, its maturity is about the same as 'B73'. It performs best when crossed to either 'B73' x 'A632' or 'B73' x 'M017'. It has white kernels and white cobs with high yield potential, but it suffers from both weak roots and stalk lodging. It is reasonably resistant to gray leaf spot (caused by Carcospora zeae-maydis). 'NC296' is the first temperate-adapted line to be developed from all-tropical parentage. It was released in the S6 gensration in Fabruary 1990.

PV Number: 9010010

Breeder: Dr. M. M. Goodman, Professor of Crop Scisnce, North Carolina State University.

Kernel Type	Flint	Anther Color	Ysllow
Best Region	SE USA	Glume Color	Red
Chromosome No.	Diploid	Dry Ear Length	15 cm
Days to Mid Silk	78	Dry Ear Diameter	39 mm
Heat Units to		Dry Ear Weight	85 gm
Mid Silk	1843	Row Distinctnsss	Distinct
Days to 25%		No. Kernsl Rows/Ear	14
Moisture	49	Row Straightness	Slightly Curved
Heat to 25%		Exposed Silk Color	Red
Moisture	1339	Frash Husk Color	Light Gresn
Plant Height	170 cm	Dry Husk Color	Buff
Ear Height	46 cm	Husk Extension	
Intsrnods Length	12 cm	Beyond Ear	8-10 cm
Tillers/Plant	None	Husk Leaf Length	< 8 cm
Ears/Plant	Strong 2-sar	Ear Shank Length	15 cm
Cytoplasm Type	Normal	No. Shank Internodss	7
Leaf Color	Light Green	Dry Ear Position	Upright
Leaf Angle	30-60 degress	Ear Taper	Average
Leaf Sheath		Ear Drying Time	Avsrage
Pubsscence	Light	Dry Karnel Length	11 mm
Leaf Marginal		Dry Kernsl Width	9 🗪
Waves	Psw	Dry Karnel Thickness	5 mm
Leaf Creasss	Pew	Kernel Shape Grade	20-40% Rounds
Leaf Width	9 cm	Pericarp Color	Colorless
Leaf Length	85 cm	Alsurons Color	Whits
Leaves/Plant	11	Endosperm Color	White
Tassel Branch		Endosperm Type	Normal Starch
Number/Plant	11	Sesd Weight	37 g/100
Tassel Branch		Cob Mid Point	
Angle	<30 degrees	Diameter	22 mm
Peduncis Length		Cob Strangth	Strong
Blads to Branch	3 cm	Cob Color	White
Pollan Shed	Medium		

Plent Dissases: Tolerant to southern lsaf blight (caused by Bipolaris maydis), gray leaf spot (caused by Cercospora zsae-maydis), and Common Smut.





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THIRD-CLASS MAIL
POSTAGE & FEES PAID
AGRICULTURAL MARKETING
SERVICE
Permit No. G-297